## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

## PERMITTEE

Solo Cup Company Attn: Robert O'Neill 1700 Old Deerfield Road Highland Park, Illinois 60035-3792

Applicant's Designation: PAPER CUP MFG. Date Received: May 30, 2001

Subject: Paper Cup Manufacturer

Date Issued: February 14, 2003 Expiration Date: February 14, 2008

Location: 1501 East 96th Street, Chicago, 60628

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of 51 flexographic presses, plat making operation, 3 mixers, cleanup operations, wastewater treatment unit, welding process, and fuel combustion sources pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for volatile organic material (VOM)). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2. Emissions of volatile organic material, VOM, and operation of the 51 flexographic presses and cleanup operations shall not exceed the following limits:

VOM Usage*		VOM E	VOM Emissions		
(Ton/Mo)	(Ton/Year)	(Ton/Mo)	(Ton/Year)		
	<u>.</u>				
2.2	22.0	2.2	22.0		

\* VOM usage limit includes all coatings, inks, clean-up solvents, and any other material containing VOM.

These limits define the potential emissions of VOM and are based on maximum material usage and VOM content for each coating, inks, clean-up solvents, and any other solvents. VOM usage shall be determined using the equation in Condition 9(c). Compliance with annual limits shall be determined from a running total of 12 months of data.

- 3. This permit is issued based on negligible emissions of VOM from the three mixers. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 4. This permit is issued based on negligible emissions of VOM from the platemaking operation, welding process, and wastewater treatment unit. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 5a. Emissions and operation of the fuel combustion sources shall not exceed the following limits:

Material	(mmscf/Mo)	(mmscf/Yr)	Pollutant	Emission Factor (Lb/mmscf)	_	sions
114 001 141	(111110017110)	(Hulloci/ II)	TOTTACATIC	(LD) HallSCI)	(1011/110)	(1011/11)
Natural Gas	42	377	$NO_x$	100	2.1	18.9
			CO	84	1.8	15.9
			PM	7.6	0.2	1.5
			MOV	5.5	0.12	1.1

These limits define the potential emissions of  $NO_x$ , CO, PM, and VOM and are based on maximum fuel usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel used in the fuel combustion sources. Use of any other fuel other than natural gas requires a permit revision.
- 6. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 7. Pursuant to 35 Ill. Adm. Code 218.401(a), any coating or ink applied at any time to the flexographic printing lines shall not exceed the following VOM content limitations:
  - a. Forty percent VOM by volume of the coating and ink (minus water and any compounds which are specifically exempted from the definition of VOM), or
  - b. Twenty-five percent VOM by volume of the volatile content in the coating and ink.
- 8. The Permittee shall perform the following recordkeeping and reporting requirements for flexographic printing lines, pursuant to 35 Ill. Adm.

Code 218.404(c) to show compliance with the emission limitations and control requirements of 35 Ill. Adm. Cod 218.401:

- a. The Permittee shall collect and record all of the following information each day for each printing line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating and ink as applied on each printing line.
  - ii. The VOM content of each coating and ink as applied each day on each printing line.
- b. The Permittee shall notify the Illinois EPA in the following instances:
  - i. Any record showing violation of Section 218.401(a) of this Part shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
  - ii. At least 30 calendar days before changing the method of compliance with Section 218.401 of this Part from Section 218.401(a) of this Part to Section 218.401(b) or (c) of this Part, the owner or operator shall comply with all requirements of subsection (d)(1) or (e)(1) of this Section, respectively. Upon changing the method of compliance with Section 218.401 of this Part from Section 218.401(a) of this Part to Section 218.401(b) or (c) of this Part, the owner or operator shall comply with all requirements of subsection (d) or (e) of this Section, respectively.
- 9. The Permittee shall maintain monthly records of the following items:
  - a. Amount of each VOM/HAP containing material used in the flexographic printing presses and cleanup operations (ton/mo and ton/yr or gal/mo and gal/yr).
  - b. VOM and HAP content of each VOM/HAP containing material used in the flexographic printing presses and cleanup operations (percent weight or lb VOM/gal).
  - c. Calculations of VOM/HAP usages/emissions for the flexographic printing presses and cleanup operations. The following equations shall be used to calculate VOM/HAP usage and emissions:

$$Te = \sum_{i=1}^{n} AiBi$$

Where:

Te = VOM/HAP usage/emissions in units of lb/mo

- n = Number of different VOM/HAP containing material used each
   month
- i = Subscript denoting an individual VOM/HAP containing material used
- Ai = Weight percent of VOM and HAP of each VOM/HAP containing material used each month (% weight or lb/gal)
- Bi = Amount of each VOM/HAP containing material used each month
   in units of lb/mo or gal/mo
- d. Amount of natural gas burned (mmscf/mo and mmscf/yr).
- 10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 11. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

<u>and</u> one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency Division of Air Pollution Control 9511 West Harrison Des Plaines, Illinois 60016

- 13. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
  - a. VOM content (percent by weight or lb VOM/gal) of each material containing VOM.
  - b. Each month's monthly and annual material usages for the preceding calendar year (i.e., preceding 12 months)
  - c. Each month's monthly and annual VOM emissions for the preceding calendar year (i.e., preceding 12 months)
  - d. Dates that the plant exceeded the annual usage or VOM limitations, if applicable.

If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

It should be noted that the wax tank, blasting operations, and formers and slitters are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(n) and (aa), respectively.

If you have any questions on this, please call Tara T. Nguyen-Ede at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

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cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

## Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from paper cup manufacturing facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 25 tons/year for volatile organic material (VOM) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

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VOM Usage*		VOM Emissions		
(Ton/Mo)	(Ton/Year)	(Ton/Mo)	(Ton/Year)	
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2.2	22.0	2.2	22.0	

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- 2. This permit is issued based on negligible emissions of VOM from the three mixers. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
- 3. This permit is issued based on negligible emissions of VOM from the platemaking operation, welding process, and wastewater treatment unit. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 4a. Emissions and operation of the fuel combustion sources shall not exceed the following limits:

				Emission Factor	Emissions	
Material	(mmscf/Mo)	(mmscf/Yr)	<u>Pollutant</u>	(Lb/mmscf)	(Ton/Mo)	(Ton/Yr)
Natural Gas	42	377	NO <sub>x</sub> CO PM VOM	100 84 7.6 5.5	2.1 1.8 0.2 0.12	18.9 15.9 1.5 1.1

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